

# Davidson County Community College

## Transportation Technology Technical Standards

### Criteria: Critical thinking and/problem solving

#### Standard:

- A) Ability to raise important questions, analyze problems and develop solutions, demonstrate the ability to reason and understand the consequences of ones actions.
  - 1) Example: Apply information, evaluate the meaning of observed system operation and engage in critical thinking in the classroom and lab setting.
  - 2) Example: Apply broad class concepts to unique customer situations.
  - 3) Example: Able to analyze and diagnose automotive system malfunctions and repair or replace defective components.
  - 4) Example: Distinguish between operating characteristics of 4, 6, and 8 cylinder engines.
  - 5) Example: Make decisions based on industry supported training materials.

### Criteria: Communication

#### Standard:

- A) Appropriate interpersonal interaction with other students, faculty, staff, customers, and other technicians.
  - 1) Example: Establish and maintain a professional relationship with customers and coworkers
- B) Communicate and comprehend oral and written information pertaining vehicle mechanics.
  - 1) Example: Explain services and repair needs, document technicians' actions.
  - 2) Example: Convey information in a clear, professional and timely manner.
  - 3) Example: Listen and respond to others in an accepting and respectful manner.
  - 4) Example: Interpret and use written information in common job formats, such as tables, charts, and reference materials and manuals.

### Criteria: Motor Skills

#### Standard:

- A) Sufficient motor function to execute movements required to repair and service modern Auto/Heavy Equipment vehicles.
  - 1) Example: Participate during automotive and engine repairs and service
  - 2) Example: Participate fully during live project and lab setting including extended periods of standing, lifting heavy equipment and being able to work on a vehicle from underneath and from above the vehicle.
  - 3) Example: Operate necessary tools, equipment, and machinery.
  - 4) Example: Able to inspect engine parts. Remove and replace failed components.
  - 5) Example: Position and maneuver in confined vehicle interior and engine compartment to do repairs.

## **Criteria: Professional Conduct**

### **Standard:**

- A) Function effectively and efficiently during demanding workload periods.
- B) Assess implications of cultural and religious diversity for classroom and workplace relationships.
  - 1) Example: Devises solutions to problems arising from gender, cultural, racial, and religious diversity.
- C) Demonstrate attitudes conducive to workplace success.
  - 1) Example: Maintain an understanding and effective relationships with customers, colleagues, faculty, staff and other industry professionals.
  - 2) Example: Work effectively with a team in an academic or live project setting.
- D) Incorporate professional standards of practice into all activities.
  - 1) Example: Refrain from using improper grammar, profane or inappropriate communications.
- E) Demonstrate integrity and accountability during field work and academic setting.
  - 1) Example: Complete all assignments in a timely manner.
  - 2) Example: Respond appropriately to constructive feedback provided by fellow students, faculty, staff, and customers.
- F) Present self in a professional manner during field projects and academic settings.
  - 1) Example: Assesses the potential impact of an individual's work ethic on an organizational system.
  - 2) Example: Wear appropriate clothing that is not distracting or offensive when in the learning environment.
  - 3) Example: Modifies behavior to increase productivity in the classroom, laboratory and workplace.
- G) Utilize computers correctly, effectively and professionally to acquire information and to communicate with others.
  - 1) Example: Utilize the internet to collect current information from appropriate resources to use during installation, service, and repair of transportation systems.

## **Criteria: Sensory**

### **Standard:**

- A) Hearing sufficient to assess equipment needs.
  - 1) Example: Hear unusual equipment noise to diagnose improper or damaged parts.
  - 2) To participate in meetings, interact with employees and receive direction.
- B) Vision sufficient for assessment necessary to service, repair and maintain transportation equipment.

- 1) Example: Vision is sufficient to perform data analysis, data entry, report preparation and usage of appropriate technology to prepare a service work order based on customer input, vehicle information and service history.
- 2) Have the ability to inspect engine parts and evaluate components for wear.

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